

M-8532 US  
09/393,899REMARKS

Applicants gratefully acknowledge the Examiner's careful observation that the CD-ROMs in the Subler reference (USP 5,646,992) could have had a code written onto them "prior to delivering the disk to the user" as noted in section #2 of the 12/16/04 Office Action. Applicants would like to expand upon this point to contrast the (rather remarkable) contributions to the optical disk arts made by the present assignee.

Consider how any mastered content is placed onto a ROM optical disk, whether that mastered content is music for a CD, a movie for a DVD, or the (non-existing and not suggested) code written to the Subler CD-ROM as proposed by the Examiner. Regardless of what that content represents, the content is first scribed onto a master disk. That master disk is used to stamp a disk substrate, which is typically polycarbonate. Having been stamped with the mastered content features, the substrate is then covered with a reflective layer (often aluminum) and finished with a protective polycarbonate coversheet that covers the reflective layer. That is how read-only DVDs and audio CDs are produced (various complications are introduced for dual layer disks, but the basic process is the same).

But note the difference should a writeable area be desired on the disk – the writeable layer requires an information layer that can absorb laser light so that bits may be effected into the information layer. But recall that the mastered content area requires a reflective layer – the ROM and RAM areas have conflicting requirements. One requires sufficient reflectivity and the other requires sufficient absorptivity. Thus, the manufacture of an optical disk having a writeable area and a mastered content area was a formidable task for the prior art. But along comes Dataplay (now doing business as DPHI) to recognize an information layer having just the right combination of reflectivity and absorptivity such that an optical disk substrate may

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be stamped with the features for the mastered content and the features (grooves/lands) for the writeable area and then covered with the advantageous information layer.

Thus, for the first time, commercially viable optical disks have been produced that contain both a mastered area and a writeable area. These disks may be seen on the website: [www.dataplay.com](http://www.dataplay.com). Claim 31 has been amended to more particularly point out and distinctly claim embodiments of the invention. In particular, the claim has been amended to positively recite the writeable area. In that regard, Applicants respectfully traverse the assertion in section 2 of the Office Action that it "would have been obvious to upgrade [Subler's] storage media from CD-ROM to the newer media of DVD (either read-only or read-write) in order to take advantage of the latest innovations in the electronic storage media." Yes, writeable DVDs exist. But they do not have mastered content on them. Once a user writes to them, they contain only content, not mastered content. Indeed, the only DVDs with mastered content (the familiar movie-containing ones) are ROM only. In sum: Subler makes absolutely no teaching or suggestion for an optical disk having both mastered content AND a writeable area.

By producing a mastered content/writable area optical disk, Applicants were also able to advance the state of the art in digital rights management (DRM) in that conventional DRM is host-based. For example, consider the Subler reference – as seen in Col. 4, lines 39 through 55, the CD-ROM contains code which is loaded onto a user's workstation (the host) and which "unlocks" the encrypted mastered content. This is standard fare in the DRM field. However, the problem with host-based DRM schemes is that they violate a user's expectations in that once a user pays for content, that user expects free use of the content. But in a host-based DRM scheme, the user is only unlocked at the host. If the user then takes the Subler disk to another player, he/she cannot access the content, despite paying for it!

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Applicants have solved this dilemma by providing a media-based DRM scheme such that once the media is unlocked by having the "first access code" code written to the writeable area (as recited in claim 31), the user may go from player to player and enjoy the content just as one would do for a conventional audio CD or movie DVD. Applicants note that the provision of the advantageous DRM scheme recited in claim 31 required tremendous effort and over 200 million dollars of development cost. Perhaps it seems obvious in hindsight. But it is not obvious over the Subler reference.

The Itami reference (USP 6,278,984) adds nothing further. To use an Itami disk, a user must first purchase a write-once optical disk having a vendor ID written to a system area. A control CPU then reads the vendor ID and compares it to the vendor ID for software to be written to the disk. As seen in Figure 2, the software/vendor ID may simply be downloaded using satellite dish 30. If the vendor IDs match, the software is written to the disk – see, e.g., the Abstract. It may be immediately seen that payment for the optical disk having the vendor ID must be tightly coupled to distribution – otherwise, you could get the disk having the appropriate vendor ID, download the software/vendor ID combination, and then be able to write the software to the disk. Thus, as set forth in Col. 9, the optical disks having the vendor IDs are available at a "sales shop" (see line 6) where the user must pay before getting the disk. In sharp contrast, the distribution of the content-mastered disks as recited in claim 31 is not coupled to payment. Instead, the payment is coupled to the distribution of the first permission code. Having possession of the first permission code, the storage engine may then generate the first access code, which is then written to the disk, thereby allowing the storage engine to access the corresponding content.

As such, claim 31 is plainly allowable over both the Subler and Itami references. The Evans reference (US Pub. No. 2003/0126033) is just as irrelevant. All Evans is directed to an

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electronic distribution scheme for software. In sum: not a single piece of prior art has been cited that suggest or teaches an optical disk having both mastered content and a writeable area, let alone the inventive media-based DRM scheme such a disk enables.

### CONCLUSION

For the foregoing reasons, Applicants respectfully submit that claims 31 through 40 are in condition for allowance.

If there are any questions regarding any aspect of the application, please call the undersigned at 949-752-7040.

I hereby certify that this correspondence is being facsimile transmitted to (703) 872-9306: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 18, 2005.

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